Lyon et al. -- Appl. No. 10/057,532

IN THE CLAIMS:

The following listing replaces all prior versions of the claims:

1. (Currently amended) A vaccine comprising a C-terminal 42 kD fragment of merozoite surface protein-1 (MSP-1₄₂) from *P. falciparum* 3D7[[,]] as set forth in SEQ ID NO:7, that is recombinantly expressed in *E. coli* as a soluble protein that retains its native structure, and an adjuvant.

2. (Cancelled)

- 3. (Currently amended) A method for inducing an immune response to malaria in a subject comprising administering to said subject a composition comprising an immunologically effective amount of C-terminal 42 kD fragment of merozoite surface protein-1 (MSP-1₄₂) from *P*. falciparum 3D7[[,]] as set forth in SEQ ID NO:7, that is recombinantly expressed in *E. coli* as a soluble protein that retains its native structure in an acceptable diluent, and an adjuvant.
- 4. (Cancelled)
- 5. (Currently amended) A method for inducing a protective immune response to malaria in a mammal, comprising

administering a composition comprising a MSP-1₄₂ from *P. falciparum* 3D7[[,]] as set forth in SEQ ID NO:7, that is recombinantly expressed in *E. coli* as a soluble protein that retains its native structure in an amount effective to induce an immune response in said mammal, and an adjuvant.

- 6. (Cancelled)
- 7. (Original) The method of claim 5, wherein the composition is administered to the individual

Lyon et al. -- Appl. No. 10/057,532

in an amount of 50 ug per dose.

- 8. (Original) The method of claim 5, wherein the composition is administered parenterally.
- 9. (Original) The method of claim 5, wherein the composition is administered intranasally.
- 10. (Original) The method of claim 5, wherein said administration is a multiple administration.
- 11. (Original) The method according to claim 10 wherein said multiple administration is at 0 and 6 months.
- 12. (Previously presented) The vaccine of claim 1, wherein the adjuvant is a formulation of 0.25 mg cholesterol, 1 mg dioleoyl phosphotidylcholine, 50 µg 3D-MPL, and 50 µg QS21, consisting of small liposomes, wherein the QS21 and the 3D-MPL are in the membranes of the liposomes.
- 13. (Previously presented) The vaccine of claim 1, wherein the adjuvant is a formulation of 10.68 mg squalene, 11.86 mg tocopherol, 4.85 mg Tween 80, 50 μ g 3D-MPL, and 50 μ g QS21 and consisting of an oil-in-water emulsion comprising the squalene and alpha-tocopherol, the emulsion being in admixture with the QS21 and 3-DPML.
- 14. (Previously presented) The vaccine of claim 1, wherein the adjuvant is a formulation of 0.25 mg cholesterol, 1 mg dioleoyl phosphotidylcholine, 50 µg 3D-MPL, 50 µg QS21 and 0.5 mg AlOH₃, said formulation consisting of small liposomes wherein the QS21 and 3D-MPL are in the membranes of the liposomes and wherein the liposomes and the antigen are absorbed onto a metallic salt particle carrier.
- 15. (Previously presented) The vaccine of claim 1, wherein the adjuvant is a formulation of 0.5 mg AlOH₃, 500 µg of unmethylated immunostimulatory oligonucleotide CpG wherein antigen

Lyon et al. -- Appl. No. 10/057,532

and immunostimulant (CpG) are absorbed onto a metallic salt particle carrier.

16. (Previously presented) The vaccine of claim 1, wherein the adjuvant is a formulation of 0.25 mg cholesterol, 1 mg dioleoyl phosphotidylcholine, $50 \mu g$ QS21, and 0.5 mg AlOH₃, consisting of small unilamellar vesicles wherein the QS21 is in the membranes of the vesicles and wherein the vesicles and the antigen are absorbed onto a metallic salt particle carrier.